

REMARKS

Introductory Comments

Prior to this Amendment, claims 12-18 and 45-57 were pending in this application. By this Amendment, the Applicants have amended claims 12-14, 17, 45 and 54, added claim 58 and cancelled claim 15 without prejudice or disclaimer of the subject matter recited therein. The Applicants do not acquiesce in the Examiner's rejections, but instead have elected to make the above-mentioned amendments in an effort to expedite prosecution of this application leading to issuance of a patent. Reconsideration of the application as amended and in view of the following remarks is earnestly solicited.

CLAIM REJECTIONS

Claim Rejection under 35 U.S.C. § 102(b) – Klein

The Examiner has maintained the rejection of claims 12-14, 18 and 53-57 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,900,935 to Klein et al. ("Klein"). However, the Applicants respectfully submit that Klein does not support the Examiner's rejection under § 102 in light of the amendments and arguments made in this response.

Legal Standards

For a claim to be anticipated under 35 U.S.C. § 102, each and every limitation of the claim must be disclosed in a single prior art reference. General Electric Co. v. Nintendo Co., 50 USPQ2d 1910, 1915 (Fed. Cir. 1999) (citing PPG Industries, Inc. v. Guardian Industries Corp., 37 USPQ2d 1618, 1624 (Fed. Cir. 1996)) ("to anticipate a claim, a reference must disclose every element of the challenged claims and enable one skilled in the art to make the anticipating subject matter."). In other words, there can be no anticipation of a claim "unless all of the same elements are found in exactly the same situation and united in the same way...in a single prior art reference." Perkin-Elmer Corp. v. Computervision Corp., 732 F.2d 888, 894, 221 USPQ (BNA) 669, 673 (Fed. Cir. 1984), citing Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 771, 218 USPQ (BNA) 781, 789 (Fed. Cir. 1983).

Analysis of Independent Claim 12

Applying the above legal standards to independent claim 12, the Applicants respectfully contend that Klein fails to meet the requirements needed to satisfy a *prima facie* case of anticipation under 35 U.S.C. § 102(b) by not disclosing "each and every" limitation of the

claimed subject matter. More particularly, unlike amended independent claim 12, Klein fails to disclose a device for identifying a first analyte of a group of analytes in a biological sample comprising, *inter alia*, a substrate including a first plurality of regions having a binding receptor thereon and configured to bind the first analyte, and a second region without the binding receptor thereon, the second region separating individual regions of the first plurality of regions. Klein also fails to teach a scanner configured to generate relative motion between a probe beam and the substrate such that a beam spot of the probe beam illuminates portions of the first plurality of regions and the second region in a sequential manner and interacts with the substrate to form a return beam, the return beam including a signal beam generated by the interaction of the probe beam with a portion of the first plurality of regions and a reference beam generated by the interaction of the probe beam with a portion of the second region.

As Klein does not disclose each element of the invention as defined by independent claim 12, its teaching fails to satisfy the anticipation standard set forth by § 102, which specifically requires that all of the claimed elements be found in “exactly the same situation and united in the same way” in a single prior art reference. Accordingly, the Examiner’s rejection of amended independent claim 12 as being anticipated by Klein is unwarranted and should be withdrawn. Removal of this rejection and allowance of claim 12 is respectfully requested. If the Examiner should disagree with the Applicants’ arguments, the Examiner is asked to kindly point out with particularity where these claimed limitations are expressly disclosed within the teachings of Klein.

Dependent Claims 13-14, 18 and 53-57

Claims 13-14, 18 and 53-57 each ultimately depend from independent claim 12. Since claim 12 is believed to be allowable for the reasons discussed above, claims 13-14, 18 and 53-57 are also believed to be allowable for being dependent thereon. Removal of the rejection and allowance of claims 13-14, 18 and 53-57 is respectfully requested. If the Examiner should disagree with the Applicants’ arguments, the Examiner is asked to kindly point out with particularity where these claimed limitations are expressly disclosed within the teachings of Klein.

Claim Rejection under 35 U.S.C. § 103 to Klein in view of Bernstein et al.

The Examiner has maintained the rejection of claims 15-17 and 45-52 under 35 U.S.C. § 103(a) as being unpatentable over Klein in view of U.S. Patent No. 5,478,750 to Bernstein et al.

(“Bernstein”). As will be explained below, the Applicants respectfully disagree with the Examiner’s contention that these references can be combined to reach the presently claimed invention.

Legal Standards

A claimed invention is unpatentable if the differences between it and the prior art “are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art.” 35 U.S.C. § 103(a); see Graham v. John Deere Co., 383 U.S. 1, 14, 148 USPQ 459, 465 (1966). “The ultimate determination of whether an invention is or is not obvious is a legal conclusion based on underlying factual inquiries including: (1) the scope and content of the prior art; (2) the level of ordinary skill in the prior art; (3) the differences between the claimed invention and the prior art; and (4) objective evidence of nonobviousness.” In re Dembiczak, 50 USPQ2d 1614, 1616 (Fed. Cir. 1999).

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine its teachings with one or more additional sources. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined), must teach or suggest all the claim limitations. M.P.E.P. § 2143. Moreover, to establish a *prima facie* case of obviousness, the Examiner must also demonstrate that there is an apparent reason to combine the known elements in the fashion claimed by the patent at issue (see KSR International Co. v. Teleflex Inc., 127 S.Ct. 1727, 82 USPQ2d 1385, (2007)). Even if each feature of a claim can be independently shown within the cited art references, this alone is insufficient to conclude that a claim is obvious in view of such art. *Id.* Instead, to render a claim obvious over a combination of cited references, an Examiner must provide “some articulated reasoning with some rationale underpinning to support the legal conclusion of obviousness.” *Id.* Moreover, the Examiner must make “explicit” this rationale of “the apparent reason to combine the known elements in the fashion claimed,” including a detailed explanation of “the effects of demands known to the design community or present in the marketplace” and “the background knowledge possessed by a person having ordinary skill in the art.” *Id.* at 14. Finally, the Examiner cannot pick and choose among the individual elements of assorted prior art references to recreate the claimed invention to support an obvious rejection; rather, the Examiner has the burden to show

some apparent reason or justification to combine the known elements in the fashion claimed by the patent at issue. *See Id.* and Smith-Kline Diagnostics, Inc. v. Helena Laboratories Corp., 8 U.S.P.Q.2d 1468, 1475 (Fed. Cir.1988).

Analysis

Independent claim 12, from which claims 13-14, 18 and 53-57 ultimately depend, is discussed in detail above, as are the deficiencies of Klein with respect to this claim. The Applicants contend that the above discussed deficiencies of Klein are also not resolved by Bernstein, which merely teaches a photometric analyzer for measuring the concentration of a substance in a fluid by using white light (comprising a continuum of wavelengths) from an arc lamp. In fact, as Bernstein discloses a series of detector assemblies, each comprising a beam splitter, an interference filter and a photodetector, and configured to break down white light into different wavebands, its disclosure actually teaches away from the present claims. More particularly, as the present invention requires the use of a single laser, the use of a series of detector assemblies such as taught by Bernstein would be superfluous. Because Bernstein teaches away from the presently claimed invention, the Examiner's reliance on Bernstein for purposes of establishing a prima facie case of obviousness is fundamentally flawed and must be withdrawn. (*see McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1354 (Fed. Cir. 2001) - As a general rule, references that teach away from a claimed invention cannot serve to create a prima facie case of obviousness; *see also, In re Gurley*, 27 F.3d 551, 553, 31 USPQ2d 1130, 1131 (Fed. Cir. 1994) - "A reference may be said to teach away when a person of ordinary skill, upon [examining] the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant").

Even assuming, *arguendo*, that Bernstein did not teach away from the present invention and could be relied on as the Examiner would so desire (which it clearly cannot), the Applicants nonetheless contend that there is no motivation to combine its teachings with that of Klein to support a rejection under 35 U.S.C. §103. This contention is further supported by the fact that the multi-wavelength white light system required by Bernstein would be inoperable if incorporated into the laser system of Klein. More particularly, as Klein teaches vibrating a workpiece using a pulse laser, while Bernstein teaches rotating the substrate to cause mixing, combining the teaching of Bernstein with that of Klein would destroy its intended purpose, namely, measuring the concentration of a substance in a fluid by breaking down white light into

different wavebands. To this end, Applicants direct the Examiner's attention to MPEP 2143.01(V), in which it is clearly explained that if a proposed modification renders the prior art invention being modified unsatisfactory for its intended purpose or changes the principle of operation of a reference, then there is no suggestion or motivation to make the proposed modification.

As the principle of operation of Bernstein would clearly need to be changed to support the Examiner's proposed combination of its teaching with that of Klein, the Examiner's reliance on these two reference to support a rejection under 35 U.S.C. §103 must be withdrawn. Reconsideration is respectfully requested.

New Claim 58

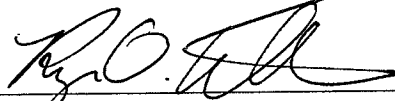
New claim 58 further defines aspects of the present invention which are also not taught by the prior art of record and is therefore believed to be in condition for allowance.

Final Comments

Applicants submit that the application is now in condition for allowance and respectfully request that the same be granted. Applicants request that, if necessary, this Amendment be considered a request for an extension of time for a time appropriate for the amendment to be timely filed. Applicants request that any required fees for filing this Amendment be charged to the account of Bose McKinney & Evans LLP, Deposit Account Number 02-3223.

Respectfully submitted,

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